



SEP 11 2012

John Martin  
Tehachapi-Cummings Water District  
PO Box 326  
Tehachapi, CA 93561

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # S-4  
Project # S-1110984**

Dear Mr. Martin:

Enclosed for your review and comment is the District's analysis of Tehachapi-Cummings Water District's application for the Federally Mandated Operating Permit for its water pumping facility, Tejon Ranch Rd, Tejon Ranch, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,

David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

Attachments

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



SEP 11 2012

Gerardo C. Rios, Chief  
Permits Office (AIR-3)  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # S-4  
Project # S-1110984**

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of Tehachapi-Cummings Water District's application for the Federally Mandated Operating Permit for its water pumping facility, Tejon Ranch Rd, Tejon Ranch, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

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SEP 11 2012

Mike Tollstrup, Chief  
Project Assessment Branch  
Air Resources Board  
P O Box 2815  
Sacramento, CA 95812-2815

**Re: Notice of Preliminary Decision - Federally Mandated Operating Permit  
District Facility # S-4  
Project # S-1110984**

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of Tehachapi-Cummings Water District's application for the Federally Mandated Operating Permit for its water pumping facility, Tejon Ranch Rd, Tejon Ranch, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Sincerely,



David Warner  
Director of Permit Services

cc: Juscelino Siongco, Permit Services Engineer

Attachments

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

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**NOTICE OF PRELIMINARY DECISION  
FOR THE PROPOSED ISSUANCE OF  
FEDERALLY MANDATED OPERATING PERMITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed issuance of the Federally Mandated Operating permits to Tehachapi-Cummings Water District for its water pumping facility, Tejon Ranch Rd, Tejon Ranch, California.

The District's analysis of the legal and factual basis for this proposed action, project #S-1110984, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed Federally Mandated Operating initial permits. If requested by the public, the District will hold a public hearing regarding issuance of this initial permit. For additional information, please contact Mr. Jim Swaney, Permit Services Manager, at (559) 230-5900. Written comments on the proposed initial permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 E. GETTYSBURG AVE, FRESNO, CALIFORNIA 93726-0244.

**SAN JOAQUIN VALLEY  
UNIFIED AIR POLLUTION CONTROL DISTRICT**

**TEHACHAPI-CUMMINGS WATER DISTRICT**

**PROPOSED ENGINEERING EVALUATION**

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**ATTACHMENT A – DETAILED FACILITY PRINTOUT  
ATTACHMENT B – EXEMPT EQUIPMENT  
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# TITLE V APPLICATION REVIEW

Project #: S-1110984  
Deemed Complete: April 25, 2011

Engineer: Juscelino Siongco  
Date: August 14, 2012

Facility Number: S-4  
Facility Name: Tehachapi-Cummings Water District  
Mailing Address: PO Box 326  
Tehachapi, CA 93561

Contact Name: Joe Selgrath  
Phone: (661) 377-0073 x12

Responsible Official: John Martin  
Title: Manager

## I. PROPOSAL

Tehachapi-Cummings Water District is proposing that an initial Title V permit be issued for its water pumping facility west of Tejon Ranch Rd in Tejon Ranch, CA. The purpose of this evaluation is to identify all applicable requirements, determine if the facility will comply with those applicable requirements, and to provide the legal and factual basis for proposed permit conditions.

## II. FACILITY LOCATION

Tehachapi-Cummings Water District is located west of Tejon Ranch Rd, Tejon Ranch in Kern County, CA.

## III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is shown in Attachment A.

A summary of the exempt equipment categories which describe the insignificant activities or equipment at the facility not requiring a permit is shown in Attachment B. This equipment is not exempt from facility-wide requirements.

## IV. GENERAL PERMIT TEMPLATE USAGE

The applicant is requesting to use the following model general permit templates:

### SJV-UM-0-3, Facility-wide Umbrella General Permit Template

The applicant has requested to utilize template #SJV-UM-03, Facility-wide Umbrella General Permit Template for unit S-4-0-3. Based on the information submitted on the Template Qualification Form, the applicant qualifies for the use of this template.

## V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate from model general permit templates and are not subject to further EPA or public review.

Conditions 1 through 40 of the requirements for the facility-wide permit S-4-0-3.

## VI. REQUIREMENTS ADDRESSED BY GENERAL PERMIT TEMPLATES

District Rule 1100, Equipment Breakdown (Amended December 17, 1992) (Non-SIP replacement for Kern County Rule 111)

District Rule 1160, Emission Statements (Adopted November 18, 1992)

District Rule 2010, Permits Required (Amended December 17, 1992)

District Rule 2020, Exemptions (Amended August 18, 2011)<sup>1</sup>

District Rule 2031, Transfer of Permits (Amended December 17, 1992)

District Rule 2040, Applications (Amended December 17, 1992)

District Rule 2070, Standards for Granting Applications (Amended December 17, 1992)

District Rule 2080, Conditional Approval (Amended December 17, 1992)

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<sup>1</sup> The amendments made to this rule on August 18, 2011 have no impact to this source; therefore template SJV-UM-0-3 is still valid for this project.

District Rule 2520, Sections 5.2, 9.1.1, 9.4, 9.5, 9.7, 9.8, 9.9, 9.13.1, 9.13.2, 9.16 and 10.0, Federally Mandated Operating Permits (Amended June 21, 2001)

District Rule 4101, Visible Emissions (Amended February 17, 2005)

District Rule 4601, Architectural Coatings (Amended December 17, 2009)

District Rule 8011, General Requirements (Amended August 19, 2004)

District Rule 8021, Construction, Demolition, Excavation, and Other Earthmoving Activities (Amended August 19, 2004)

District Rule 8031, Bulk Materials (Amended August 19, 2004)

District Rule 8041, Carryout and Trackout (Amended August 19, 2004)

District Rule 8051, Open Areas (Amended August 19, 2004)

District Rule 8061, Paved and Unpaved Roads (Amended August 19, 2004)

District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas (Amended September 16, 2004)

40 CFR Part 82, Subpart B and F, Stratospheric Ozone

40 CFR Part 61, Subpart M, National Emission Standard for Asbestos

## **VII. REQUIREMENTS NOT ADDRESSED BY GENERAL PERMIT TEMPLATES**

District Rule 1081, Source Sampling (Amended December 16, 1993)

District Rule 2201, New and Modified Stationary Source Review Rule (Amended April 21, 2011)

District Rule 2520, Federally Mandate Operating Permits (Amended June 21, 2001)

District Rule 4201, Particulate Matter Concentration (Amended December 17, 1992)

District Rule 4701, Internal Combustion Engines – Phase 1 (Amended August 21, 2003)

District Rule 4702, Internal Combustion Engines (Amended August 18, 2011)

40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

Kern County Rule 407, Sulfur Compounds

## VIII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the Federally Enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as Federally Enforceable through Title V Permit.

This facility is subject to the following rule that is not currently federally enforceable:

### **District Rule 4102, Nuisance**

This rule prevents the discharge from any source whatsoever such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such person or the public or which cause or have a natural tendency to cause injury or damage to business or property.

#### S-4-0-3: Facility-Wide Requirements

- Condition 41 on the proposed permit complies with this rule.

### **District Rule 4801, Sulfur Compounds**

The purpose of this rule is to limit the emissions of sulfur compounds. A maximum concentration and test method are specified. A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: two-tenths (0.2) percent by volume calculated as sulfur dioxide (SO<sub>2</sub>), on a dry basis averaged over 15 consecutive minutes.

#### S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)

- Condition 2 on the proposed permit complies with this rule.

## IX. COMPLIANCE

### **A. Requirements Addressed by Model General Permit Templates**

## 1. Facility Wide Requirements

The applicant is proposing to use a general permit template to address federally applicable facility-wide requirements. Section IV of template SJV-UM-0-3 includes a demonstration of compliance for all applicable requirements. Template conditions have been added to the facility wide requirements, S-4-0-3, as condition numbers 1 through 40 to assure compliance with these requirements.

## B. Requirements Not Addressed by Model General Permit Templates

### 1. District Rule 1081, Source Sampling

The purpose of this rule is to ensure that any source operation which emits or may emit air contaminants provides adequate and safe facilities for use in sampling to determine compliance. This rule also specifies methods and procedures for source testing, sample collection, and compliance determination.

#### §7.0 Administrative Requirements

§7.1 The District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling.

§7.2 Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel.

§7.3 Source test reports must be submitted to the District within 60 days of completion of field testing. Source tests must be submitted for all District authorized compliance source tests regardless of pass, fail or reschedule because of failure, status.

- a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)
  - Conditions 13 and 14 in the proposed permit comply with this rule.
- b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)
  - Conditions 12 and 13 in the proposed permit comply with this rule.

- c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)
  - Conditions 12 and 13 in the proposed permit comply with this rule.
- d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)
  - Conditions 12 and 13 in the proposed permit comply with this rule.

**2. District Rule 2201, New and Modified Stationary Source Review Rule**

The permit units are subject to the District Rule 2201 upon application for Authority to Construct (ATC). In accordance with the White Paper for Streamlined Development of Part 70 Permit Applications, dated July 10, 1995, conditions from the resulting Permit to Operate (PTO) were addressed to define how NSR permit terms should be incorporated into the Title V permit.

- a. S-4-0-3: Facility-Wide Requirements
  - Condition 1 from the current PTO has been included as condition 41 on the requirements for the proposed permit.
  - Conditions 2 through 8 from the current PTO have been included as conditions 1 through 7 on the requirements for the proposed permit.
  - Conditions 9 and 10 from the current PTO have been included as conditions 11 and 22 on the requirements for the proposed permit.
  - Conditions 11 through 14 from the current PTO have been updated and included as conditions 23 and 24 on the requirements for the proposed permit.
  - Condition 15 from the current PTO has been included as condition 25 on the requirements for the proposed permit.
  - Conditions 16, 17, and 18 from the current PTO have been included as conditions 29, 30, and 33 on the requirements for the proposed permit.
- b. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)
  - Condition 1 from the current PTO has been included as condition 1 on the requirements for the proposed permit.

- Conditions 2 and 3 from the current PTO have been moved to the Facility-Wide permit as conditions 22 and 41, respectively.
  - Condition 4 from the current PTO has been included as condition 2 on the requirements for the proposed permit.
  - Condition 5 from the current PTO has been included as condition 3 on the requirements for the proposed permit. The condition is revised to require that the total annual emissions from the permit units are calculated on a 12-month rolling average in order to comply with Title V requirements.
  - Conditions 6 through 27 from the current PTO have been included as conditions 4 through 25 on the requirements for the proposed permit.
- c. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)
- Condition 1 from the current PTO has been included as condition 1 on the requirements for the proposed permit.
  - Conditions 2 and 3 from the current PTO have been moved to the Facility-Wide permit as conditions 22 and 41, respectively.
  - Condition 4 from the current PTO has been included as condition 2 on the requirements for the proposed permit.
  - Condition 5 from the current PTO has been included as condition 3 on the requirements for the proposed permit. The condition is revised to require that the total annual emissions from the permit units are calculated on a 12-month rolling average in order to comply with Title V requirements.
  - Conditions 6 through 25 from the current PTO have been included as conditions 4 through 23 on the requirements for the proposed permit.
- d. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)
- Condition 1 from the current PTO has been included as condition 1 on the requirements for the proposed permit.
  - Conditions 2 and 3 from the current PTO have been moved to the Facility-Wide permit as conditions 22 and 41, respectively.
  - Condition 4 from the current PTO has been included as condition 2 on the requirements for the proposed permit.
  - Condition 5 from the current PTO has been included as condition 3 on the requirements for the proposed permit. The condition is

revised to require that the total annual emissions from the permit units are calculated on a 12-month rolling average in order to comply with Title V requirements.

- Conditions 6 through 25 from the current PTO have been included as conditions 4 through 23 on the requirements for the proposed permit.
- e. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)
- Condition 1 from the current PTO has been included as condition 1 on the requirements for the proposed permit.
  - Conditions 2 and 3 from the current PTO have been moved to the Facility-Wide permit as conditions 22 and 41, respectively.
  - Condition 4 from the current PTO has been included as condition 2 on the requirements for the proposed permit.
  - Condition 5 from the current PTO has been included as condition 3 on the requirements for the proposed permit. The condition is revised to require that the total annual emissions from the permit units are calculated on a 12-month rolling average in order to comply with Title V requirements.
  - Conditions 6 through 25 from the current PTO have been included as conditions 4 through 23 on the requirements for the proposed permit.
- f. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator
- Condition 1 from the current PTO has been included as condition 1 on the requirements for the proposed permit.
  - Conditions 2 and 3 from the current PTO have been moved to the Facility-Wide permit as conditions 22 and 41, respectively.
  - Conditions 4 through 14 from the current PTO have been included as conditions 2 through 12 on the requirements for the proposed permit.

### **3. District Rule 2520, Federally Mandated Operating Permits**

The purpose of this rule is to provide for an administrative mechanism for issuing operating permits for new and modified sources of air contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for issuing renewed operating permits for sources of air

contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for revising, reopening, revoking, and terminating operating permits for sources of air contaminants in accordance with requirements of 40 CFR Part 70; an administrative mechanism for incorporating requirements authorized by preconstruction permits issued under District Rule 2201 (New and Modified Stationary Source Review) in a Part 70 permit as administrative amendments, provided that such permits meet procedural requirements substantially equivalent to the requirements of 40 CFR 70.7 and 70.8, and compliance requirements substantially equivalent to those contained in 40 CFR 70.6; and the applicable federal and local requirements to appear on a single permit.

#### Greenhouse Gas Requirements

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

#### **4. District Rule 4201, Particulate Matter Concentration**

The purpose of this rule is to protect the ambient air quality by establishing a particulate matter emission standard. Section 3.1 requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas.

#### Natural Gas-Fired Internal Combustion Engines

The expected concentration of PM emitted from a natural gas-fired lean-burn IC engine is shown by the following analysis:

$$\left( \frac{0.00991 \text{ lb} - \text{PM}}{10^6 \text{ Btu}} \right) \times \left( \frac{7,000 \text{ grains}}{\text{lb}} \right) \times \left( \frac{10^6 \text{ Btu}}{8,710 \text{ dscf}} \right) = 0.0080 \frac{\text{grain}}{\text{dscf}}$$

Where:

$$\frac{0.00991 \text{ lb} - \text{PM}}{10^6 \text{ Btu}} = \text{Emission Factor (AP-42 7/00, Table 3.2-2)}$$

$$\frac{10^6 \text{ Btu}}{8,710 \text{ dscf}} = \text{F Factor (40 CFR 60, Appendix A-7, Table 19-1)}$$

The preceding analysis demonstrates that the IC engines firing on natural gas will be in compliance with the PM limits of this rule.

- a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)
  - Condition 1 on the proposed permit complies with this rule.
- b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)
  - Condition 1 on the proposed permit complies with this rule.
- c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)
  - Condition 1 on the proposed permit complies with this rule.
- d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)
  - Condition 1 on the proposed permit complies with this rule.
- e. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator
  - Condition 1 on the proposed permit complies with this rule.

## **5. District Rule 4701, Internal Combustion Engines–Phase 1**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines. Except as provided in Section 4.0, the provisions of this rule apply to any internal combustion engine, rated greater than 50 bhp that requires a Permit to Operate (PTO).

Pursuant to Section 2.0 of District Rule 4701, these engines are subject to District Rule 4701–*Internal Combustion Engines–Phase 1*. In addition, these engine are also subject to District Rule 4702–*Internal Combustion Engines–Phase 2*.

Since the emissions limits of District Rule 4702 and all other requirements are equivalent or more stringent than District Rule 4701 requirements, compliance with 4702 rule requirements will satisfy requirements of District Rule 4701 and no further discussion is required.

## **6. District Rule 4702, Internal Combustion Engines**

The purpose of this rule is to limit the emissions of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SO<sub>x</sub>) from internal combustion engines. This rule applies to any internal combustion engine rated at 25 brake horsepower or greater.

§4.2 Except for the requirements of Sections 5.9 and 6.2.3, the requirements of this rule shall not apply to an emergency standby engine or a low-use engine, provided that the engine is operated with an operating nonresettable elapsed time meter.

§4.3 Except for the administrative requirements of Section 6.2.3, the requirements of this rule shall not apply to the following:

4.3.1 An internal combustion engine that meets the following conditions:

4.3.1.1 The engine is operated exclusively to preserve or protect property, human life, or public health during a disaster or state of emergency, such as a fire or flood; and

4.3.1.2 Except for operations associated with Section 4.3.1.1, the engine is limited to operate no more than 100 hours per calendar year as determined by an operational nonresettable elapsed time meter, for periodic maintenance, periodic readiness testing, and readiness testing during and after repair work of the engine; and

4.3.1.3 The engine is operated with an operational nonresettable elapsed time meter.

§5.2 Stationary Engines Rated at Greater than 50 Brake Horsepower (>50 bhp)

§5.2.1 Spark Ignited Engines Used in non-AO<sup>2</sup> - Table 1 Emission Limits/Standards.

The operator of a spark-ignited internal combustion engine rated at >50 bhp that is used exclusively in non-AO shall not operate it in such a manner that results in emissions exceeding the limits in Table 1 for the appropriate engine type.

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<sup>2</sup> Agriculture Operations (AO)

Table 1 Emission Limits/Standards for a Spark-Ignited Internal Combustion Engine rated at >50 bhp Used Exclusively in Non-AO (All ppmv limits are corrected to 15% oxygen on a dry basis.).			
Engine Type	NO <sub>x</sub>	CO	VOC
2. Lean-Burn			
a. Two stroke, gaseous fueled, less than 100 horsepower	75 ppmv or 85% reduction	2000 ppmv	750 ppmv
b. All other engines	65 ppmv or 90% reduction	2000 ppmv	750 ppmv

§5.8 Monitoring Requirements: Non-AO Spark-Ignited Engines and Engines in an AECF (Section 8.0)

The operator of a non-AO spark-ignited engine subject to the requirements of Section 5.2 or any engine subject to the requirements of Section 8.0 shall comply with the following requirements:

§5.8.1 For each engine with a rated brake horsepower of 1,000 bhp or greater and which is allowed by Permit-to-Operate or Permit-Exempt Equipment Registration condition to operate more than 2,000 hours per calendar year, or with an external emission control device, either install, operate, and maintain continuous monitoring equipment for NO<sub>x</sub>, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO approved alternate monitoring. The monitoring system may be a continuous emissions monitoring system (CEMS), a parametric emissions monitoring system (PEMS), or an alternative monitoring system approved by the APCO. APCO-approved alternate monitoring shall consist of one or more of the following:

- 5.8.1.1 Periodic NO<sub>x</sub> and CO emission concentrations,
- 5.8.1.2 Engine exhaust oxygen concentration,
- 5.8.1.3 Air-to-fuel ratio,
- 5.8.1.4 Flow rate of reducing agents added to engine exhaust,
- 5.8.1.5 Catalyst inlet and exhaust temperature,
- 5.8.1.6 Catalyst inlet and exhaust oxygen concentration, or
- 5.8.1.7 Other operational characteristics.

§5.8.6 For each engine, install and operate a nonresettable elapsed time meter.

§5.8.7 For each engine, implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO.

## §6.1 Emission Control Plan

The operator of an engine subject to the requirements of Section 5.2 of this rule shall submit to the APCO an APCO-approvable emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.2 and the compliance schedules of Section 7.0.

§6.2.1 The operator of an engine subject to the requirements of Section 5.2 of this rule shall maintain an engine operating log to demonstrate compliance with this rule. This information shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request. The engine operating log shall include, on a monthly basis, the following information:

- 6.2.1.1 Total hours of operation,
- 6.2.1.2 Type of fuel used,
- 6.2.1.3 Maintenance or modifications performed,
- 6.2.1.4 Monitoring data,
- 6.2.1.5 Compliance source test results, and
- 6.2.1.6 Any other information necessary to demonstrate compliance with this rule.
- 6.2.1.7 For an engine subject to Section 8.0, the quantity (cubic feet of gas or gallons of liquid) of fuel used on a daily basis.

§6.2.3 An operator claiming an exemption under Section 4.2 or Section 4.3 shall maintain annual operating records. This information shall be retained for at least five years, shall be readily available, and provided to the APCO upon request. The records shall include, but are not limited to, the following:

- 6.2.3.1 Total hours of operation,
- 6.2.3.2 The type of fuel used,
- 6.2.3.3 The purpose for operating the engine,
- 6.2.3.4 For emergency standby engines, all hours of non-emergency and emergency operation shall be reported, and
- 6.2.3.5 Other support documentation necessary to demonstrate claim to the exemption.

§6.3.2 Demonstrate compliance with applicable limits, ppmv or percent reduction, in accordance with the test methods in Section 6.4.

- 6.3.2.1 By the applicable date specified in Section 5.2, and at least once every 24 months thereafter.

## §6.4 Test Methods

Compliance with the requirements of Section 5.2 shall be determined, as required, in accordance with the following test procedures or any other method approved by EPA and the APCO:

- 6.4.1 Oxides of nitrogen - EPA Method 7E, or ARB Method 100.
- 6.4.2 Carbon monoxide - EPA Method 10, or ARB Method 100.
- 6.4.3 Stack gas oxygen - EPA Method 3 or 3A, or ARB Method 100.
- 6.4.4 Volatile organic compounds - EPA Method 25A or 25B, or ARB Method 100. Methane and ethane, which are exempt compounds, shall be excluded from the result of the test.
- 6.4.5 Operating horsepower determination - any method approved by EPA and the APCO.
- 6.4.6 SO<sub>x</sub> Test Methods

- 6.4.6.1 Oxides of sulfur – EPA Method 6C, EPA Method 8, or ARB Method 100.
- 6.4.6.2 Determination of total sulfur as hydrogen sulfide (H<sub>2</sub>S) content – EPA Method 11 or EPA Method 15, as appropriate.
- 6.4.6.3 Sulfur content of liquid fuel – American Society for Testing and Materials (ASTM) D 6920-03 or ASTM D 5453-99.

- a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)
  - Conditions 7 through 12, 15 through 23, and 25 on the proposed permit comply with this rule.
- b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)
  - Conditions 2, 7 through 11, 14 through 21, and 23 on the proposed permit comply with this rule.
- c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)
  - Conditions 2, 7 through 11, 14 through 21, and 23 on the proposed permit comply with this rule.

- d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)
  - Conditions 2, 7 through 11, 14 through 21, and 23 on the proposed permit comply with this rule.
- e. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator
  - Conditions 5 through 12 on the proposed permit comply with this rule.

**7. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

This subpart applies to owners and operators of stationary spark ignition (SI) internal combustion engine (ICE) for which construction, modification, or reconstruction commenced after June 12, 2006.

The SI ICE in this facility are not subject to this rule since the units were all constructed prior to June 12, 2006 and have never been modified or reconstructed as defined in the rule.

**8. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585 states an owner or operator is subject to this subpart if it owns or operates a stationary RICE at a major or area source of HAP emissions.

§63.6585(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year.

§63.6585(c) An area source of HAP emissions is a source that is not a major source.

- This facility is an area source of HAP emissions since it is not a major source of HAP per §63.6585(b).

§63.6590(a)(1)(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

- The engines in this facility commenced construction before June 12, 2006 and are existing.

§63.6595(a)(1) If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)

- Conditions 26 and 27 on the proposed permit comply with this rule.

b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)

- Conditions 24 and 25 on the proposed permit comply with this rule.

c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)

- Conditions 24 and 25 on the proposed permit comply with this rule.

d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)

- Conditions 24 and 25 on the proposed permit comply with this rule.

- e. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator
  - Conditions 5, 6, and 12 through 17 on the proposed permit comply with this rule.

## 9. 40 CFR Part 64, CAM

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

- a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)

This permit unit has emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

- b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)

This permit unit has emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

- c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)

This permit unit has emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

- d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)

This permit unit has emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

- e. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator

This permit unit has emissions limits for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC but it does not have add-on controls for these criteria pollutants. Therefore, this permit unit is not subject to CAM for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC.

#### 10. Kern County Rule 407

This rule contains a limit on sulfur compounds. The limit at the point of discharge is 0.2 percent by volume, which is 2,000 ppmv, calculated as sulfur dioxide (SO<sub>2</sub>), on a dry basis averaged over 15 consecutive minutes.

The following analysis will show that the engines in this facility comply with this rule when firing on PUC regulated natural gas.

The maximum fuel sulfur content that can be combusted in natural gas-fired IC engines that will meet the 2,000 ppmv emission limit is calculated as follows:

The combustion equation for natural gas is (neglecting NO<sub>x</sub> and SO<sub>x</sub> relative to O<sub>2</sub> in the exhaust):



Where:

Y = moles of sulfur in the fuel

X = moles of excess air

Solving an expression for the fraction of O<sub>2</sub> in the exhaust by volume gives:

$$\frac{X}{3 + X + (2 + X)3.78} = 0.04 \Rightarrow X = 0.523$$

Where:

3 = combined total moles of CO<sub>2</sub> and H<sub>2</sub>O in the exhaust

0.04 = fraction of O<sub>2</sub> in the exhaust by volume

Solving for Y in an expression for the fraction of SO<sub>2</sub> in the dry exhaust by volume gives:

$$\frac{Y}{1 + 0.523 + 9.54} = 0.002 \Rightarrow Y = 0.022$$

Where:

Y = mole fraction of S per mole of CH<sub>4</sub> combusted

1 = moles of CO<sub>2</sub> in the exhaust

9.54 = moles of N<sub>2</sub> in the exhaust

0.002 = 2,000 ppmv SO<sub>x</sub> emission limit

Using Y to calculate the weight fraction of S in one mole of CH<sub>4</sub>:

$$\frac{(0.022)(32.06)}{16.04 + (0.022)(32.06)} = 0.042 = 4.2\% \text{ S by weight in the fuel}$$

Where:

32.06 = molecular weight of sulfur (S)

16.04 = molecular weight of CH<sub>4</sub>

0.042 = fraction of S by weight in the fuel

Natural gas with a sulfur content of less than 4.2% by weight will satisfy the county's sulfur compounds rule.

General Order 58-A of the Public Utilities Code (PUC) requires all natural gas that enters the PUC pipeline for distribution to consumers contains less than or equal to 5 grains of total sulfur per 100 standard cubic feet. All natural gas that enters the PUC pipeline for distribution to consumers is tested regularly to assure that its composition conforms to these standards. This standard can be converted to an expression of weight percent of sulfur in the natural gas (ng) calculated as follows:

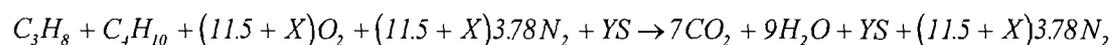
$$\%S \left( \frac{lb-S}{lb-NG} \right) = 100 \times \left( \frac{5gr}{100ft^3} \right) \left( \frac{1lb}{7000gr} \right) \left( \frac{24.45L}{mol-NG} \right) \left( \frac{1mol-NG}{16.04g} \right) \left( \frac{453.59g}{1lb} \right) \left( \frac{0.035ft^3}{1L} \right)$$

= 0.017% sulfur

The emissions units in this facility are required to fire on PUC regulated natural gas except for unit S-4-9-4 which may also fire LPG/propane.

The following analysis will show that unit S-4-9-4 complies with this rule when firing on LPG/propane.

Assuming the Liquefied Petroleum Gas is 50% Propane and 50% Butane, the combustion equation is (neglecting NO<sub>x</sub> and SO<sub>x</sub> relative to O<sub>2</sub> in the exhaust):



Where:

X = moles of excess air

Y = moles of sulfur in the fuel

Solving an expression for the fraction of O<sub>2</sub> in the exhaust by volume gives:

$$\frac{X}{16 + X + (11.5 + X)3.78} = 0.04 \Rightarrow X = 2.94$$

Where:

16 = combined total moles of CO<sub>2</sub> and H<sub>2</sub>O in the exhaust

0.04 = fraction of O<sub>2</sub> in the exhaust by volume

Solving for Y in an expression for the fraction of SO<sub>2</sub> in the dry exhaust by volume gives:

$$\frac{Y}{7 + 2.94 + 54.5} = 0.002 \Rightarrow Y = 0.129$$

Where:

Y = mole fraction of S per mole of CH<sub>4</sub> combusted

7 = moles of CO<sub>2</sub> in exhaust

54.5 = moles of N<sub>2</sub> exhaust

0.002 = 2000 ppmv SO<sub>x</sub> emission limit

Use Y to calculate the weight fraction of S in 1 mole of LPG:

$$\frac{(0.129)(32.06)}{102.18 + (0.129)(32.06)} = 0.039 = 3.9\%$$

S by weight in the fuel

Where:

32.06 = molecular weight of sulfur (S)

102.18 = average molecular weight of C<sub>3</sub>H<sub>8</sub> and C<sub>4</sub>H<sub>10</sub>

0.0105 = fraction of S by weight in the fuel

Therefore, combustion of LPG with a sulfur content of less than 3.9% by weight will assure compliance with this rule. The sulfur content of commercial grade LPG is 15 grains per 100 cubic feet or less. Converting this to a percentage by weight of LPG yields:

$$\%S \left( \frac{lbS}{lbLPG} \right) = 100 \times \left( \frac{15gr}{100ft^3} \right) \left( \frac{1lb}{7000gr} \right) \left( \frac{24.45L}{molLPG} \right) \left( \frac{1molLPG}{102.18g} \right) \left( \frac{453.59}{1lb} \right) \left( \frac{0.035ft^3}{1L} \right)$$

$$= 0.0080\% S$$

0.008% sulfur by weight is much less than the maximum of 3.9% which will assure compliance with the sulfur emissions limit of 2000 ppmv.

- a. S-4-5-8: 1,200 bhp Waukesha Model 5790GL S/N C-10634-1 Lean Burn I.C. Engine Powering a Water Pump (Engine #1, Plant #1)
  - Conditions 2 and 5 on the proposed permit comply with this rule.
- b. S-4-6-7: 1,070 bhp Waukesha Model 5790GL S/N 402992 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #2, Plant #1)
  - Condition 5 on the proposed permit complies with this rule.
- c. S-4-7-7: 1,070 bhp Waukesha Model 5790GL S/N 402993 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #3, Plant #1)
  - Condition 5 on the proposed permit complies with this rule.
- d. S-4-8-8: 1,070 bhp Waukesha Model 5790GL S/N C11010/1 Natural Gas-Fired Lean-Burn IC Engine Powering a Water Pump (Engine #4, Plant #1)
  - Condition 5 on the proposed permit complies with this rule.

- e. S-4-9-4: 80 bhp Generac Model 4.3GN Natural Gas or LPG/Propane-Fired Rich-Burn Emergency Standby IC Engine Powering an Electrical Generator

- Condition 2 on the proposed permit complies with this rule.

## **X. PERMIT SHIELD**

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

### **A. Requirements Addressed by Model General Permit Templates**

By using the model general permit template listed in Section IV of this evaluation, the applicant has requested that a permit shield be issued for requirements addressed in the template. The basis for each permit shield is discussed in the Permit Shield section of each template.

## **XI. PERMIT CONDITIONS**

See draft operating permit beginning on the following page.

# San Joaquin Valley Air Pollution Control District

FACILITY: S-4-0-3

EXPIRATION DATE: 08/31/2014

## FACILITY-WIDE REQUIREMENTS

1. {4362} The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
2. {4363} The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (8/18/11). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: TEHACHAPI-CUMMINGS WATER DIST  
Location: WEST OF TEJON RANCH RD, TEJON RANCH, CA  
S-4-0-3 : Aug 14 2012 1:37PM -- SONGCOJ

10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit
35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
39. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
41. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
42. On month, day, year, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-4-5-8

**EXPIRATION DATE:** 08/31/2014

**SECTION:** 5 **TOWNSHIP:** 31S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

1,200 BHP WAUKESHA MODEL 5790GL S/N C-10634-1 NATURAL GAS-FIRED LEAN-BURN IC ENGINE POWERING A WATER PUMP WITH TURBOCHARGER AND INTERCOOLER (ENGINE #1, PLANT #1)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rules 4801 and Kern County Rule 407] Federally Enforceable Through Title V Permit
3. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits based on a 12-month rolling average: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation based on a 12-month rolling average (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Utilization of this IC engine shall not exceed 1,200 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 9.2 cfs, two IC engine/pumps operating - 8.6 cfs, and three or more IC engine/pumps operating - 8.1 cfs. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
8. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
10. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

11. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
13. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
15. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
16. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
19. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

22. The permittee shall maintain records of: (1) the date and time of O2 and NOx measurements, (2) the O2 concentration in percent and the measured NOX concentration corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
26. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63 Subpart ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
27. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ. [40 CFR 63.6585 and 63.6595(a)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-6-7

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,070 BHP WAUKESHA MODEL 5790GL S/N 402992 NATURAL GAS-FIRED LEAN-BURN IC ENGINE POWERING A WATER PUMP (IC ENGINE #2, PLANT #1)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits based on a 12-month rolling average: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation based on a 12-month rolling average (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
8. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

11. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
16. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

21. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
22. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63 Subpart ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
25. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ. [40 CFR 63.6585 and 63.6595(a)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-7-7

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,070 BHP WAUKESHA MODEL 5790GL S/N 402993 NATURAL GAS-FIRED LEAN-BURN IC ENGINE POWERING A WATER PUMP (ENGINE #3, PLANT #1)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits based on a 12-month rolling average: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation based on a 12-month rolling average (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
8. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

11. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
16. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

21. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
22. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63 Subpart ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
25. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ. [40 CFR 63.6585 and 63.6595(a)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-4-8-8

**EXPIRATION DATE:** 08/31/2014

**SECTION:** 5 **TOWNSHIP:** 31S **RANGE:** 25E

**EQUIPMENT DESCRIPTION:**

1,070 BHP WAUKESHA MODEL 5790GL S/N C11010/1 NATURAL GAS-FIRED LEAN-BURN IC ENGINE POWERING A WATER PUMP (ENGINE #4, PLANT #1)

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
3. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits based on a 12-month rolling average: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation based on a 12-month rolling average (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
8. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
9. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
10. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
12. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
13. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
14. The acceptable exhaust gas O2 range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
15. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
16. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
17. The permittee shall monitor and record the stack concentration of O2 at least once every month and the stack concentration of NOx and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. If either the O2 concentration or the NOx concentration corrected to 15% O2, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O2 and/or NOx to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
20. The permittee shall maintain records of: (1) the date and time of O2 and NOx measurements, (2) the O2 concentration in percent and the measured NOx concentration corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

21. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
22. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
24. By October 19, 2012, the owner/operator shall submit an Authority to Construct (ATC) permit application to the District to comply with 40 CFR 63 Subpart ZZZZ. [District Rule 2010] Federally Enforceable Through Title V Permit
25. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ. [40 CFR 63.6585 and 63.6595(a)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-4-9-4

**EXPIRATION DATE:** 08/31/2014

**SECTION:** 14 **TOWNSHIP:** 11N **RANGE:** 18R

**EQUIPMENT DESCRIPTION:**

80 BHP GENERAC MODEL 4.3GN NATURAL GAS OR LPG/PROPANE-FIRED RICH-BURN EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas or LPG/propane. [District Rule 2201] Federally Enforceable Through Title V Permit
3. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Emissions from this IC engine shall not exceed any of the following limits: 10.98 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.073 g-PM10/hp-hr, 10.34 g-CO/hp-hr, or 8.62 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 40 CFR 63.6625(f)] Federally Enforceable Through Title V Permit
6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702 and 40 CFR 63.6640 (f)(ii)] Federally Enforceable Through Title V Permit
7. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702] Federally Enforceable Through Title V Permit
8. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
9. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
10. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

11. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702] Federally Enforceable Through Title V Permit
12. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63.6660] Federally Enforceable Through Title V Permit
13. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)] Federally Enforceable Through Title V Permit
14. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63.6585/63.6595(a)] Federally Enforceable Through Title V Permit
15. On and after October 19, 2013, the engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first. [40 CFR 63.6603/63.6640 Table 2d, Row 4a] Federally Enforceable Through Title V Permit
16. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63.6603/63.6640 Table 2d, row 5a] Federally Enforceable Through Title V Permit
17. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63.6603/63.6640 Table 2d, Row 4c] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

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# Attachment A

## Detailed Facility Printout

**Detailed Facility Report**  
For Facility=4 and excluding Deleted Permits  
Sorted by Facility Name and Permit Number

TEHACHAPI-CUMMINGS WATER DIST WEST OF TEJON RANCH RD TEJON RANCH, CA	FAC # STATUS: TELEPHONE:	S 4 A 8058225504	TYPE: TOXIC ID:	TitleV	EXPIRE ON: AREA: INSP. DATE:	08/31/2014 9 / 06/13
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PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
S-4-5-7	1,200 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,200 BHP WAUKESHA MODEL 5790GL LEAN BURN I.C. ENGINE POWERING A WATER PUMP (ENGINE #1, PLANT #1) S/N C-10634-1 WITH TURBOCHARGER AND INTERCOOLER AT PLANT #1
S-4-6-6	1,070 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS FIRED IC ENGINE, S/N 402992, POWERING A WATER PUMP (IC ENGINE #2, PLANT #1)
S-4-7-6	1,070 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE, S/N 402993, POWERING A WATER PUMP (ENGINE #3, PLANT #1)
S-4-8-6	1,070 BHP IC ENGINE	3020-10 F	1	749.00	749.00	A	1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE, S/N C11010/1, POWERING A WATER PUMP (ENGINE #4, PLANT #1)
S-4-9-3	80 BHP IC ENGINE	3020-10 A	1	80.00	80.00	A	80 BHP GENERAC MODEL 4.3GN RICH-BURN NATURAL GAS OR LPG/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR

Number of Facilities Reported: 1

# Attachment B

## Exempt Equipment

**San Joaquin Valley  
Unified Air Pollution Control District  
Title V Application - INSIGNIFICANT ACTIVITIES**

COMPANY NAME: TEHACHAPI CUMMINGS COUNTY WATER DISTRICT

FACILITY ID: S-4

Check the box next to the exemption category from Rule 2020 which describes any insignificant activity or equipment at your facility not requiring a permit.

Exemption Category	Rule 2020 Citation	√	Exemption Category	Rule 2020 Citation	√
Structure or incinerator assoc. with a structure designed as a dwelling for 4 families or less	4.1		Containers used to store refined lubricating oils	6.6.8	√
Locomotives, airplanes, and watercraft used to transport passengers or freight	4.4		Unvented pressure vessels used exclusively to store liquified gases or assoc with exempt equipment	6.6.9 or 6.13	
Natural gas or LPG-fired boilers or other indirect heat transfer units of 5 MMBtu/hr or less	6.1.1		Portable tanks used exclusively to store produced fluids for ≤ six months	6.6.10	
Piston-type i.c.engine with maximum continuous rating of 50 braking horsepower (bhp) or less	6.1.2		Mobile transport tanks on delivery vehicles of VOCs	6.6.11	
Gas turbine engines with maximum heat input rating of 3 MMBtu/hr or less	6.1.3		Loading racks used for the transfer of less than 4,000 gal/day of unheated organic material with initial boiling point ≥ 302 F or of fuel oil with specific gravity ≥0.8251	6.7.1.1	
Space heating equipment other than boilers	6.1.4	√	Loading racks used for the transfer of asphalt, crude or residual oil stored in exempt tanks, or crude oil with specific gravity ≥ 0.8762	6.7.1.2	
Cooling towers with a circulation rate less than 10,000 gal/min, and that are not used for cooling of process water, or water from barometric jets or condensers++	6.2		Equipment used exclusively for the transfer of refined lubricating oil	6.7.2	
Use of less than 2 gal/day of graphic arts materials	6.3		Equipment used to apply architectural coatings	6.8.1	
Equipment at retail establishments used to prepare food for human consumption	6.4.1		Unheated, non-conveyorized cleaning equipment with < 10 ft <sup>2</sup> open area; using solvents with initial boiling point ≥ 248 F; and < 25 gal/yr. evaporative losses	6.9	
Ovens at bakeries with total daily production less than 1,000 pounds and exempt by sec. 6.1.1	6.4.3		Brazing, soldering, or welding equipment	6.10	
Equipment used exclusively for extruding or compression molding of rubber or plastics, where no plastisizer or blowing agent is used	6.5		Equipment used to compress natural gas	6.11	
Containers used to store clean produced water	6.6.1		Fugitive emissions sources assoc. with exempt equipment	6.12	
Containers ≤100 bbl used to store oil with specific gravity ≥ 0.8762	6.6.2		Pits and Ponds as defined in Rule 1020	6.15	
Containers ≤ 100 bbl installed prior to 6/1/89 used to store oil with specific gravity ≥ 0.8762	6.6.3		On-site roadmix manufacturing and the application of roadmix as a road base material	6.17	
Containers with a capacity ≤ 250 gallons used to store organic material where the actual storage temperature <150 F	6.6.4		Emissions less than 2 lb/day from units not included above	6.19	
Containers used to store unheated organic material with an initial boiling point ≥ 302 F	6.6.5		Venting PUC quality natural gas from for sole purpose of pipeline and compressor repair and or maintenance	7.2	√
Containers used to store fuel oils or non-air-blown asphalt with specific gravity ≥0.9042	6.6.6		Non-structural repairs & maintenance to permitted equipment	7.3	√
Containers used to store petroleum distillates used as motor fuel with specific gravity ≥ 0.8251	6.6.7		Detonation of explosives ≤ 100 lb/day and 1,000 lb/year	7.4	

No insignificant activities (Check this box if no equipment in the above categories exist at your facility.)

Attachment C

SJVUAPCD Permits



# Permit to Operate

**FACILITY:** S-4

**EXPIRATION DATE:** 08/31/2014

**LEGAL OWNER OR OPERATOR:**

TEHACHAPI-CUMMINGS WATER DIST

**MAILING ADDRESS:**

PO BOX 326  
TEHACHAPI, CA 93581

**FACILITY LOCATION:**

WEST OF TEJON RANCH RD  
TEJON RANCH, CA

**FACILITY DESCRIPTION:**

WATER SUPPLY

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

**Seyed Sadredin**

Executive Director / APCO

**David Warner**

Director of Permit Services

# San Joaquin Valley Air Pollution Control District

FACILITY: S-4-0-1

EXPIRATION DATE: 08/31/2014

## FACILITY-WIDE REQUIREMENTS

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1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]
3. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
4. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0]
5. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (7/21/94). [District Rule 2010, 3.0 and 4.0; and Rule 2020]
6. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070]
7. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031]
8. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040]
9. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. [District Rule 1100, 7.0]
10. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (12/17/92), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101]

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units.

Facility Name: TEHACHAPI-CUMMINGS WATER DIST  
Location: WEST OF TEJON RANCH RD, TEJON RANCH, CA  
S-4-0-1: Jul 12 2012 9:46AM -- SIONGCOJ

11. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1]
12. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1 (12/17/92)), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 of Rule 4601 (12/17/92). [District Rule 4601, 5.2]
13. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4]
14. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5]
15. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2 (12/17/92). [District Rule 4601, 6.1 and 6.2]
16. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 (4/25/96) unless specifically exempted under section 4 of Rule 8020 (4/25/96). [District Rule 8020]
17. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030 (4/25/96), unless specifically exempted under section 4 of Rule 8030 (4/25/96). [District Rule 8030]
18. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 (4/25/96) unless specifically exempted under section 4 of Rule 8060 (4/25/96). [District Rule 8060]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-5-7

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,200 BHP WAUKESHA MODEL 5790GL LEAN BURN I.C. ENGINE POWERING A WATER PUMP (ENGINE #1, PLANT #1) S/N C-10634-1 WITH TURBOCHARGER AND INTERCOOLER AT PLANT #1

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rules 4801]
5. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits: 893 lb-SO<sub>x</sub>/yr, 4,060 lb-PM<sub>10</sub>/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201]
6. Utilization of this IC engine shall not exceed 1,200 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 9.2 cfs, two IC engine/pumps operating - 8.6 cfs, and three or more IC engine/pumps operating - 8.1 cfs. [District Rule 2201]
7. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201]
8. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
9. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub>, equivalent to 0.91 g-NO<sub>x</sub>/hp-hr, 0.011 g-SO<sub>x</sub>/hp-hr, 0.05 g-PM<sub>10</sub>/hp-hr, 492 ppmvd CO @ 15% O<sub>2</sub>, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O<sub>2</sub>, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702, 5.1]
10. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be conducted within 60 days of initial start-up. [District Rules 4701 and 4702, 6.3]
11. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3]
12. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702, 6.3]
13. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

14. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702, 6.4]
15. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
16. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
17. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702, 6.5.1]
18. The permittee shall install and operate a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of installing a nonresettable fuel meter, the owner or operator may use a non-resettable elapsed operating time meter in conjunction with the engine manufacturer's maximum rated fuel consumption to determine annual fuel usage. [District Rules 4701 and 4702, 5.6.6]
19. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
20. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.8]
21. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702, 5.6 and 6.5.2]
22. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702, 6.5.3 and 6.5.4]
23. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702, 5.6.9 and 6.5.6]
24. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702, 6.5.7]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

25. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2]
26. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201]
27. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702, 6.2.2]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-6-6

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS FIRED IC ENGINE, S/N 402992, POWERING A WATER PUMP (IC ENGINE #2, PLANT #1)

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits: 893 lb-SO<sub>x</sub>/yr, 4,060 lb-PM<sub>10</sub>/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201]
6. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201]
7. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201]
8. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
9. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NO<sub>x</sub> @ 15% O<sub>2</sub>, equivalent to 0.91 g-NO<sub>x</sub>/hp-hr, 0.011 g-SO<sub>x</sub>/hp-hr, 0.05 g-PM<sub>10</sub>/hp-hr, 492 ppmvd CO @ 15% O<sub>2</sub>, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O<sub>2</sub>, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702, 5.1]
10. Source testing to measure natural gas-combustion NO<sub>x</sub>, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3]
11. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702, 6.3]
12. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NO<sub>x</sub>, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702, 6.4]
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
16. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702, 6.5.1]
17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.8]
19. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702, 5.6 and 6.5.2]
20. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702, 6.5.3 and 6.5.4]
21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702, 5.6.9 and 6.5.6]
22. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702, 6.5.7]
23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2]
24. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702, 6.2.2]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-7-6

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE, S/N 402993, POWERING A WATER PUMP (ENGINE #3, PLANT #1)

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201]
6. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201]
7. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201]
8. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
9. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702, 5.1]
10. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3]
11. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702, 6.3]
12. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

13. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702, 6.4]
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
16. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702, 6.5.1]
17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.8]
19. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702, 5.6 and 6.5.2]
20. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702, 6.5.3 and 6.5.4]
21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702, 5.6.9 and 6.5.6]
22. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702, 6.5.7]
23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2]
24. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
These terms and conditions are part of the Facility-wide Permit to Operate.

25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702, 6.2.2]

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-4-8-6

EXPIRATION DATE: 08/31/2014

SECTION: 5 TOWNSHIP: 31S RANGE: 25E

## EQUIPMENT DESCRIPTION:

1,070 BHP WAUKESHA MODEL 5790GL LEAN-BURN NATURAL GAS-FIRED IC ENGINE, S/N C11010/1, POWERING A WATER PUMP (ENGINE #4, PLANT #1)

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
5. Total annual emissions from permit units S-0004-5, -6, -7, and -8 shall not exceed the following limits: 893 lb-SOx/yr, 4,060 lb-PM10/yr, 339,443 lb-CO/yr, or 121,810 lb-VOC/yr. Annual emissions from permit units S-0004-5, -6, -7, and -8 shall be calculated by using the following formula: Annual emissions = Total Hours of Operation (hrs/yr) x Emission Factor (g-pollutant/hp-hr) x Horsepower Rating (hp) ÷ 453.6 g/lb. [District Rule 2201]
6. Utilization of this IC engine shall not exceed 1,070 hp, as determined by maintaining the water pumping rate for each unit at or below the following amounts: one IC engine/pump operating - 8.2 cfs, two IC engine/pumps operating - 7.8 cfs, and three or more IC engine/pumps operating - 7.3 cfs. [District Rule 2201]
7. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas. [District Rule 2201]
8. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
9. Emissions from this IC engine shall not exceed any of the following limits: 65 ppmvd NOx @ 15% O2, equivalent to 0.91 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.05 g-PM10/hp-hr, 492 ppmvd CO @ 15% O2, equivalent to 4.18 g-CO/hp-hr, or 309 ppmvd VOC @ 15% O2, equivalent to 1.50 g-VOC/hp-hr. [District Rules 2201, 4701, and 4702, 5.1]
10. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rules 4701 and 4702, 6.3]
11. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702, 6.3]
12. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702, 6.3]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE  
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13. The following test methods shall be used: NO<sub>x</sub> (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane. [District Rules 4701 and 4702, 6.4]
14. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
16. The acceptable exhaust gas O<sub>2</sub> range shall be established from manufacturer's information, or by source testing this unit. [District Rules 4701 and 4702, 6.5.1]
17. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Maintenance (I&M) plan submitted to the District. [District Rule 4702, 6.5.5]
18. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702, 6.5.8]
19. The permittee shall monitor and record the stack concentration of O<sub>2</sub> at least once every month and the stack concentration of NO<sub>x</sub> and O<sub>2</sub> at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O<sub>2</sub> monitors may be allowed if approved by the APCO.] Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. [District Rules 4701 and 4702, 5.6 and 6.5.2]
20. If either the O<sub>2</sub> concentration or the NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, as measured by the portable analyzer, is outside the permitted range, the permittee shall return the O<sub>2</sub> and/or NO<sub>x</sub> to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue outside the permitted range after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rules 4701 and 4702, 6.5.3 and 6.5.4]
21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702, 5.6.9 and 6.5.6]
22. The permittee shall maintain records of: (1) the date and time of O<sub>2</sub> and NO<sub>x</sub> measurements, (2) the O<sub>2</sub> concentration in percent and the measured NO<sub>x</sub> concentration corrected to 15% O<sub>2</sub>, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 4701 and 4702, 6.5.7]
23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rules 4701 and 4702, 6.2]
24. The permittee shall maintain on file copies of natural gas bills. [District Rules 1070 and 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702, 6.2.2]

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# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-4-9-3

**EXPIRATION DATE:** 08/31/2014

**SECTION:** 14 **TOWNSHIP:** 11N **RANGE:** 18R

**EQUIPMENT DESCRIPTION:**

80 BHP GENERAC MODEL 4.3GN RICH-BURN NATURAL GAS OR LPG/PROPANE-FIRED EMERGENCY IC ENGINE POWERING AN ELECTRICAL GENERATOR

## PERMIT UNIT REQUIREMENTS

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1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. This unit shall only be fired on Public Utility Commission (PUC) regulated natural gas or LPG/propane. [District Rule 2201]
5. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
6. Emissions from this IC engine shall not exceed any of the following limits: 10.98 g-NOx/hp-hr, 0.011 g-SOx/hp-hr, 0.073 g-PM10/hp-hr, 10.34 g-CO/hp-hr, or 8.62 g-VOC/hp-hr. [District Rule 2201]
7. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
8. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year. [District Rule 4702]
9. This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]
10. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]
11. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]
12. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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13. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]
14. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702]

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